

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for gang scheduling, the method comprising:
a first member of a gang recognizing an event, the gang including the first member and a plurality of other members; and in response to said recognition of the event, the first member sending a multicast dispatch message to the plurality of other members, the multicast dispatch message including an indication of a gang priority level; and
the plurality of other members receiving the multicast dispatch message; and in response: each particular member of the plurality of other members raising a priority level of a process associated with said each particular member to that corresponding to the gang priority level in order to cause an approximate or actual simultaneous response to the gang dispatch message on each of the plurality of other gang members, and said each particular member of the plurality of members then performing an operation associated with the multicast dispatch message in said process at the gang priority level.

Claim 2 (currently amended): The method of claim 1, wherein said performing the operation by said each particular member includes generating one or more results; and wherein said method comprising said comprises each particular member of the plurality of other members communicating its respective said one or more results to the first member.

Claim 3 (original): The method of claim 2, wherein said operation includes collecting one or more statistics values and said one or more results includes said one or more statistics values.

Claim 4 (original): The method of claim 1, wherein the multicast dispatch message includes a set of routing updates, and said operation includes updating a data structure with the set of routing updates.

Claim 5 (original): The method of claim 1, wherein the multicast dispatch message includes a fault indication, and said operation includes updating configuration or routing information in response to the fault indication.

Claim 6 (original): The method of claim 1, wherein the event includes the detection of a fault, and the operation is a corrective measure associated with the fault.

Claim 7 (original): The method of claim 1, comprising raising the priority level of the first member to the gang priority level before said sending the multicast dispatch message.

Claim 8 (currently amended): An apparatus for gang scheduling, the apparatus comprising:

means for maintaining gang membership of a scheduling gang, said gang membership including a plurality of other gang members;

means for dispatching and communicating gang dispatch messages to the plurality of other gang members, said gang dispatch messages including a scheduling priority level; and

wherein each of the plurality of other gang members includes: means for receiving a particular gang dispatch message; and messages, said particular gang dispatch messages associated with a priority level; and means for: in response to said receipt of said particular gang dispatch message: modifying a priority level of a process to the scheduling priority level included in said received gang dispatch message in order cause an approximate or actual simultaneous response to the gang dispatch message on each of the plurality of other gang members , and then performing an operation corresponding to said particular gang dispatch message in the process at the scheduling priority level included in said particular gang dispatch message.

Claim 9 (original): The apparatus of claim 8, wherein said means for dispatching and communicating gang dispatch messages includes means for performing reliable group communication.

Claim 10 (original): The apparatus of claim 9, wherein said means for reliable group communication includes means for acknowledging less than all of a series of gang dispatch messages.

Claim 11 (original): The apparatus of claim 9, wherein said means for reliable group communication includes means for performing immediate and delayed acknowledgement of received gang dispatch messages.

Claim 12 (currently amended): An apparatus including one or more processing elements and memory, wherein said memory stores one or more instructions that, when executed by said one or more processors, implements processes comprising:

a first member of a gang; and

a plurality of other members of the gang;

wherein the first member is configured to recognize an event, and in response, send a multicast dispatch message to the plurality of other members, the multicast dispatch message including an indication of a gang priority level; and

wherein the plurality of other members are each configured to receive the multicast dispatch message, and in response to said receipt of the multicast dispatch message: to change a processing priority level of a process to that corresponding to the gang priority level including in the multicast dispatch message in order to cause an approximate or actual simultaneous response to the gang dispatch message on each of the plurality of other gang members, and then to perform an operation associated with the multicast dispatch message in the process at the gang priority level.

Claim 13 (original): The apparatus of claim 12, wherein said performing the operation includes generating one or more results; and wherein said each of the plurality of other members is configured to communicate said one or more results to the first member.

Claim 14 (original): The apparatus of claim 13, wherein said operation includes collecting one or more statistics values and said one or more results includes said one or more statistics values.

Claim 15 (original): The apparatus of claim 12, wherein the first member is configured to raise its priority level to at least the gang priority level in response to recognizing the event and before sending the multicast dispatch message.

Claim 16 (original): The apparatus of claim 12, wherein each of the plurality of other members of the gang are included on different line cards of a packet switching system.

Claim 17 (original): The apparatus of claim 12, wherein the multicast dispatch message includes a set of routing updates, and said operation includes updating a data structure with the set of routing updates.

Claim 18 (original): The apparatus of claim 12, wherein the multicast dispatch message includes a fault indication, and said operation includes updating configuration or routing information in response to the fault indication.

Claim 19 (original): The apparatus of claim 12, wherein the event includes the detection of a fault, and the operation is a corrective measure associated with the fault.